## ABSTRACT OF THE DISCLOSURE

In a heat exchanger for performing heat exchange between a first fluid and a second fluid, a corrugated plate is provided in a first tube defining a first fluid passage through which the first fluid flows. The corrugated plate forms ridges and grooves. Walls between the ridges and grooves include first walls, second walls and third walls. Each first wall defines an opening between its second end and a second side wall of the first tube. Each second wall defines openings at its first and second ends. Each third wall defines an opening between its first end and the first side wall of the first tube. The first to third walls are reiterative in an order of the first wall, the second wall, the third wall and the second wall. Therefore, the first fluid makes double serpentine flows each of which makes alternately large and small turns.